Haoying Zhang

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 LinkedIn Profile | Github (Master projects) | GitLab (PhD projects)

Palaiseau, Ile de France - 91300, France

PhD student with expertise in privacy-enhancing technologies with time series data. I am looking for a research visit starting in February 2026, or a post-doc starting in August 2026, based in Montreal or its surrounding area, in Canada.

EDUCATION

- **Inria de Saclay and INSA**   *September 2023 - August 2026*
  PhD in Computer Science (Expected)   Palaiseau, France
  ◦ Privacy-Enhancing Technologies with Time Series

  ◦ **Supervisors:** Benjamin Nguyen, Nicolas Anciaux

- **Institut National des Sciences Appliquées (INSA)**   *September 2018 - Juin 2023*
  Engineering Master's Degree (Double Degree with Master of Research in Cybersecurity)   Rennes, France
  ◦ Major: Computer Science

  ◦ Grade: 15.17/20 (Rank: 3/74)

EXPERIENCE

- **ENSTA Paris [⊕]**   *September 2023 - Present*
  Teaching Assistant   Palaiseau, France
  ◦ Taught Oracle Database to second-year engineering students

  ◦ Prepared materials (VMs, servers) and supported students with exercises and individual problem-solving

  ◦ Co-supervised an master student's research internship at Inria

- **INSA CVL [⊕]**   *Feburary 2023 - August 2023*
  Research Intern   Bourges, France
  ◦ Research internship with topic "Privacy-Preserving Graph Processing"

  ◦ Developed a framework called PUZZLE to compute PageRank on large distributed graph in a privacy-preserving way (with Differential Privacy guarantee)

- **NAGRA NexGuard [⊕]**   *May 2022 - August 2022*
  Intern   Rennes, France
  ◦ Engineering internship with topic "High Performance Computing for Forensic Watermarking Algorithms"

  ◦ Implemented Single Instruction Multiple Data (SIMD) architectures with vector processors on x86 and ARM

  ◦ Integrated SIMD architectures into forensic watermarking algorithms to achieve high performance on multiple platforms

- **Huawei [⊕]**   *July 2021 - September 2021*
  Intern   Beijing, China
  ◦ Engineering internship with topic "Routing Protocol Testing"

  ◦ Learnt 8+ TCP/IP routing protocols

  ◦ Designed the topologies and implemented automatic tests

PUBLICATIONS   C=CONFERENCE, J=JOURNAL, S=IN SUBMISSION

[J.1] Haoying Zhang, et al. (2025). **TELESAFE: Detecting Private/Work Boundary Crossings in Energy Consumption Trails in Telework**. In *VLDB Endowment*, pp. 1565 - 1578. ACM. 29 August 2025. DOI: 10.14778/3725688.3725690

[C.1] Haoying Zhang, et al. (2025). **Demo: Exploring Utility and Attackability Trade-offs in Local Differential Privacy**. Accepted for publication in *CCS 2025*.

[C.2] Haoying Zhang, et al. (2026). **Privacy Attacks on Matrix Profiles via Reconstruction Techniques**. Accepted for publication in *PETS 2026*.

[S.1] Haoying ZHang, et al. (2026). **Demo of TELESAFE: Monitoring Energy Consumption for Work–Life Boundaries in Telework**. Accepted for publication in *ICDM 2025*.

SKILLS

- **Programming Languages:** Assembly, C, C++, Python, Java, OCaml, Perl, Ruby, JavaScript, PHP
- **Database Systems:** MySQL, Oracle
- **Machine Learning:** Classification algorithms, RNNs, CNNs, GANs, etc
- **Cloud & Containerization:** Docker, Kubernetes
- **DevOps:** Git

PROJECTS

- **Mycelium**   *September 2021 - Juin 2022*
  Tools: Embedded system, C++, LoRaWAN, Raspberry Pi, Docker, Kubernetes   [🌐]
  - Implemented an alarm system in sensors to trigger actions based on weather scenarios
  - Developed a Kubernetes-based fog infrastructure on a Raspberry Pi cluster for storing and processing sensor data transmitted via LoRaWAN, enabling monitoring of natural environments in Rennes
  - Collaborated with scientists and engineers from Geosciences Rennes and Clermont-Ferrand University

- **Exchange Rate Reminder**   *August 2020*
  Tools: Python, InfluxDB   [🐙]
  - Developed a web-scraping application with data processing and storage in InfluxDB
  - Implemented an email notification system triggered by exchange rate drops

- **Chessboard game**   *August 2020*
  Tools: JavaFx   [🐙]

VOLUNTEER EXPERIENCE

- **Mathematics and Physics Tutor**   *September 2018 - Feburary 2019*
  INSA
  - Tutored fellow students in mathematics and physics through classes and Q&A sessions

- **Volunteer at the Planetarium**   *August 2014*
  Beijing Planetarium
  - Guided visitors through exhibits and provided telescope demonstrations

ADDITIONAL INFORMATION

Languages: Chinese (Mother tongue), French (Fluent: DELF B2, 85/100), English (Fluent: TOEIC, 945/990)
Interests: Snowboarding, Badminton, Running, Astronomy